1987 Summary of Avocado Research, pages 21-22 Avocado Research Advisory Committee University of California, Riverside

COOPERATIVE EXTENSION COUNTY ACTIVITIES Ventura and Santa Barbara Counties Avocado Activities for 1986

<u>Ron Bekey</u>

I have been involved in writing items on avocados: avomation series (one-sheet answers on avocados); monthly newspaper/news media column for Ventura newspaper and others; Bi-monthly Newsletter for Ventura and Santa Barbara counties (Fruit Facts and Orchard Management). A cost study update for 1987 will be available shortly.

Meetings I participated in were: Grower meetings organized by Cooperative Extension; Spring "update" meetings on irrigation/ fertilization, disease control, and pest control in avocados; Avocado/Citrus Institute; Subtropical Institute; Irrigation "round-table" discussions with Fruit Grower's Laboratory, Resource Conservation District (RCD) and two grove managers; "Water Meetings" in which there was cooperation between several Ventura county agencies; Farm Center meetings; Ag. roundtable meetings with Farm Bureau in which I was involved with several Santa Barbara agencies; Root rot plot tour; Greenhouse Thrips research plot update for PCA's; Avocado/Citrus luncheons with Farm Bureau; "O.J. Club" field trips in which some of the meetings involved avocados; Agricultural computer users' group; and Avocado school began March, 1987.

I have participated in a number a research projects including Greenhouse Thrips plot in Summerland, Santa Barbara county. I have been a Cooperator on a SCFS clonal rootstock trial; Dr. Coffey's studies—assisting with locating cooperators, maintaining relations with cooperators, labor in spraying trees, etc.; and also with Mary Lu Arpaia dealing with potassium deficiency study in Ojai and a freeze damage study in Ventura county.

Organizations I worked with in 1986 (other than UC) were: California Avocado Commission; California Avocado Society (membership, rootstock and variety committees); Brokaw Nursery; Resource Conservation District; Ventura County Water Agency; Calavo; Farm Bureau; Realtors dealing with avocado land sales; PCA's associated with chemical companies and private; Insectaries; Agricultural Commissioners; Pro-Ag; and Limoneira.

AVOCADO PROGRAM IN SANTA BARBARA COUNTY.

George E. Goodall, County Director and Farm Advisor

The two major problems, on which we continue to exert research and extension efforts on behalf of avocado growers, are the avocado root rot disease, and the control of greenhouse thrips.

Root rot infections of <u>Phytophthora cinnamomi</u> occur in an estimated three-fourths of the groves with nearly 5% of the trees declining annually. Growers desperately need help with this disease. Fortunately, Dr. Michael Coffey, UCR Plant Pathologist, continues to conduct much of his field research in this area. Such plots include trials of resistant rootstocks, chemical treatments, replanting, injections, and biological control. We cooperate fully with Dr. Coffey and try to facilitate the trials that are so far away from Riverside.

The trials involving the combination treatments of replanting on mounds, using the G755 rootstock, treated with Ridomil, and carefully irrigated with a drip system are succeeding in the better orchard sites.

Another disease, <u>Phytophthora citricola</u>, is being recognized in more and more groves. The cankers are girdling the trunks and damaging the roots of a few trees in an estimated 20% of the groves. We have been assisting Dr. Coffey with surveys and cooperating in the one rootstock replant trial underway.

The Greenhouse Thrips, <u>Heliothrips hemorrhoidalis</u>, is the key pest problem in that it has no known, significant biological control species. Its natural control is mainly by weather extremes. So growers of susceptible Hass variety fruit, that chose to market their fruit late in the season, have been spraying with Malathion. This treatment is effective on the GHT, but also destroys many of the beneficial insects. The long-range effect has been to experience economically damaging build ups of Avocado Brown Mite, <u>Olgonichus punicae</u>, Six-Spotted Mite, <u>Eotetranychus sexmaculatus</u>, Omnivorous Looper, <u>Sabulodea aecrotata</u>, Avocado Leaf Roller, <u>Amorbia curneana</u>, and Latania Scale, <u>Hemiberlesia lataniae</u>.

A large scale IPM trial is underway, with a key orchard located at Summerland, that brings together the efforts of Dr. Blair Bailey, UCR Entomologist, Dr. Phil Phillips, IPM Specialist in Ventura, Dr. Ron Bekey, Ventura and Santa Barbara Counties Farm Advisor, and Dr. James McMurtry, UCR Entomologist (biological control). The trials are in their third year and include weekly monitoring of pest populations, trials of appropriate chemicals, liberation of parasites and predators, and weather records.

In addition to the above major problems, we conduct meetings and field trips, issue a quarterly newsletter, produce a cost study every few years, and other typical farm advisor educational efforts. A new effort in the last several years has been to assist growers with information for their efforts -to prevent public hiking and riding trails being forced through some of their orchards by the county.